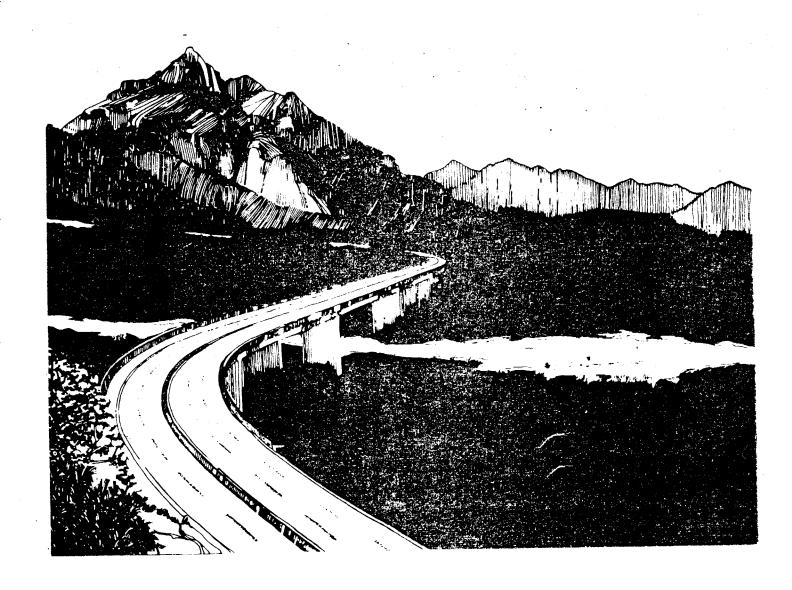


Federal Highway
Administration

Office of Environmental Policy

# Visual Impact Assessment for Highway Projects

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## Visual Impact Assessment for Highway Projects

Office of Environmental Policy Washington, D.C.

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### VISUAL QUALITY

Esthetics is concerned not only with the character of visual experience, but also with its excellence. Where it exists, this excellence has both viewer and visual resource dimensions. The enjoyment or interpretation of experience can have many preferential and subjective components, yet there is clear public agreement that the visual resources of certain landscapes have high visual quality and that plans for projects in these areas should therefore be subject to careful examination.

On the level of visual information or visual character, such landscapes may have little in common. For instance, high visual quality is recognized in urban landscapes such as the New York skyline, as well as in natural landscapes such as the Grand Tetons. Both of these exhibit striking vertical relief, yet horizontal landscapes such as Cape Cod are also recognized for their high quality. Visual quality has often been tied to water, always nearby on Cape Cod, but desert landscapes such as Bryce Canyon are also noted for visual quality. Because of these differences in the character of the visual environment, a project in an area with high visual quality does not always have an adverse effect on that visual quality. How do we establish which landscapes have high visual quality and what is its basis?

#### Approaches to Assessing Visual Quality

Pragmatic approaches to answering these questions start with the recognition that Americans agree on the high visual quality of many landscapes. Some of these places are already officially designated—national parks and scenic rivers, for example. This may be considered proof of high visual quality, and a first approach to establishing the visual quality of a project area is simply to check for designated scenic areas. However, there is no comprehensive official process for identifying areas of high visual quality.

nor does NEPA allow us to consider only superlative environments.

A second approach is to ask project viewer groups their visual preference for the principal landscape types in the project area. This approach has the virtue of directness and can avert challenge based on the potential difference between professional judgment and public opinion. However, it can also have its difficulties, including time, cost. and statistical validity, particularly when there are strong differences in values between local and regional viewer groups. Viewer preference techniques can be very useful for identifying areas to avoid during project location, but are not as helpful for devising and evaluating mitigation measures for areas the project cannot avoid crossing.

A third approach, used by several federal land-managing agencies, looks to the regional landscape for specific resource indicators of visual quality. High quality ratings are assigned to those landscape units which most clearly or dramatically exhibit the natural processes characteristic of the geographic region. Resource indicators of visual quality may be on the level of visual information (e.g., rock faces, avalanche cones) or visual character (e.g., variety). This approach has primarily been used for settings that are natural in appearance. It also tends to presume a region-wide visual analysis as a starting point and may be difficult to implement on a project-by-project basis.

A fourth approach to the evaluation of visual quality looks for indicators on the level of visual relationships rather than on the level of landscape components. A number of such relationships correlate well enough with public judgments of visual quality to predict those judgments. In other words, professionals can use these relationships as valid and reliable criteria for evaluative appraisals of visual quality. These criteria can be used within different geographic regions, as long as direct comparisons of visual quality are kept within the same region.